

item **940** sub-element into a portion of a print job **950** based, at least in part, on whether the mobile device protocol logic **920** supports transmitting a print item sub-element type. For example, one implementation of Bluetooth BPP may support preparing a JPEG file for transmission over a Bluetooth based wireless network while another implementation of Bluetooth BPP may not support preparing a GIF file for transmission over a Bluetooth based wireless network.

[**0061**] The system can include data store **910** that stores a configurable print item sub-element holder. Thus, in one example, the content-transforming logic **930** may be configured to place a processed print item sub-element in a configurable print item sub-element holder. The configurable print item sub-element holder may be, for example, an XHTML template, an XHTML-Print template, and the like. But, there may be a variety of sub-element holders into which a print item sub-element may be placed. Thus, in one example, the protocol logic **920** is configured to select a print item sub-element holder into which the content-transforming logic will process a print item sub-element based, at least in part, on attributes including, but not limited to, the number of print item sub-elements to be processed, the type of print item sub-elements to be processed, the variety of types of print item sub-elements to be processed, and a print data transmission protocol supported by the protocol logic **920**.

[**0062**] By way of illustration, the protocol logic **920** may determine that there is one print item sub-element to place in print job **950**. This single print item sub-element may be a graphics file that includes a time stamp and a caption. Furthermore, the protocol logic **920** may determine that a cover sheet is appropriate for this type of graphic (e.g., secure information). Thus, the protocol logic **920** may select a sub-element holder from data store **910** based on the protocol that will be employed to transmit the print job **950** to an image forming device and the number and type of elements (e.g., single time stamped captioned image of secure data) in the print item. By way of further illustration, the protocol logic **920** may determine that there are four hundred print item sub-elements to place in print job **950**. For example, a user may desire to print out their entire contacts file. Thus, the protocol logic **920** may select a modular sub-element holder from data store **910** that facilitates arranging multiple images and text on a single page, and that facilitates processing multiple instances of the page. Furthermore, the protocol logic **920** may select a sub-element holder or set of sub-element holders that facilitate first and last page treatments, headers and footers and the like.

[**0063**] It is to be appreciated that a configurable print item sub-element holder may support print functions including, but not limited to, positioning, centering, rotating, and scaling a print item sub-element. Similarly, it is to be appreciated that a configurable print item sub-element holder may support print functions including, but not limited to, a first page treatment functionality, a last page treatment functionality, a header functionality, a footer functionality, a page numbering functionality, a multiple image-per-page functionality, a functionality for combining a text print item sub-element or one or more image print item sub-elements, and a time stamping functionality for a print job.

[**0064**] The cellular telephone **900** may have applications or logics that have native data types. For example, a contact

application may have a native data type for storing contacts. Similarly, a calendar application may have a native data type for storing calendar information. While a contact and a calendar application are described, it is to be appreciated that a cellular telephone **900** and/or wireless devices for which it may act as a print server may have other applications with other native data types. Thus, in one example, the content transforming logic **930** is configured to process a print item that includes a variable of a data type that is native to a cellular telephone **900**. In another example, the content transforming logic **920** is configured to process data types that are native to the cellular telephone **900** and that are dynamically extensible.

[**0065**] As described above, various forms of filtering may be employed in a cellular telephone protocol adaptive print system. Thus, cellular telephone **900** may include a filtering logic **960** configured to perform one or more of the filtering operations described above.

[**0066**] FIG. 10 illustrates an example image forming device **1000** that includes a compatible RF transceiver logic **1005**. The image forming device **1000** may include a memory **1010** configured to store a printer-ready object received from a cellular telephone where the object was prepared to conform with a print data transmission protocol.

[**0067**] The image forming device **1000** may be configured to respond to queries from cellular telephones relating to print jobs. Therefore, the image forming device **1000** may include a print service request logic **1015** that, when the image forming device **1000** is queried, can transmit information about the object stored in memory **1010** and/or the processing thereof in response to the print service query. The print service request logic **1015** may also, periodically, or under image forming device **1000** control, transmit information about the object stored in memory **1010** and/or the processing thereof. The print service request logic **1015** may be implemented, for example, as a logic. The print service request logic **1015** may also be configured to initiate the transmission of the data to a cellular telephone without receiving a query, status request or print service request. For example, one or more elements of the information about a print job can be automatically transmitted based on predetermined triggering events like a time period elapsing, a processing event occurring, and/or other event occurring. In this manner, the image forming device **1000** can provide automatic status updates to cellular telephones that have a print job being processed. It will also be appreciated that the print service request logic **1015** can also be configured to monitor and provide state information and the like for print data associated with multiple cellular telephones.

[**0068**] Additionally, the image forming device **1000** may include rendering logic **1025** configured to generate a printer-ready image from a received non-printer-ready object received, for example, in an imaging request. Rendering varies based on the format of the data involved and the type of imaging device. In general, the rendering logic **1025** converts a high-level object-based description (e.g., the imaging request) into a graphical image for a display or printing (e.g., the print-ready image). For example, one form is ray-tracing that takes a mathematical model of a three-dimensional object or scene and converts it into a bitmap image. Another example is the process of converting HTML into an image for display/printing. In another example, the